§ 164.015–3 Material and workmanship.

(a) The unicellular plastic foam shall be all new material complying with the requirements of this specification. The results of the tests described in § 164.015–4 shall yield property values within the limits shown in Table 164.015–4(a).

(b) The unicellular plastic foam shall be produced in sheet stock or molded shapes.

§ 164.015–4 Inspections and tests.

(a) *General.* Unicellular plastic foam to be used in a finished product subject to inspection by the Coast Guard also shall be subject to inspection at the plant where the foam is manufactured. The manufacturer of the foam has primary responsibility for quality control over the production of the foam. A marine inspector shall be admitted to any place in the factory where production or partial processing of the foam takes place, and he may take samples of the foam or other materials for further inspections or tests. The manufacturer shall provide a suitable place and the apparatus necessary for the performance of certain tests to be witnessed by the marine inspector, the results of which shall comply with Table 164.015–4(a). Unless otherwise specified, all tests shall be conducted at a temperature of 21° ±3 °C. (70° ±5 °F.) The properties listed in Table 164.015–4(a) shall be determined on specimens of sheet foam or molded shapes.

TABLE 164.015–4(a)

Properties	Test method	Units	Type A	Type B	Type C
Density (maximum)	164.015–4(b)	Pounds/feet^3	5.0	5.0	8.5
Buoyancy in fresh water (minimum)	164.015–4(c)	Pounds/feet^3	54.0	54.0	52.0
Volume loss on heat aging (maximum).	164.015–4(d)	Percent	5.0	5.0	4.0
Compression deflection at 25 percent.	164.015–4(e)	P.s.i.	3.0 max.	3.0 max.	7.0 min.
Compression set (maximum)	164.015–4(f)	Percent	24	24	20
Fire retardance (maximum)	164.015–4(g)(1)	Seconds	2	.....	30
		Inches	1	.....	3
	164.015–4(g)(2)	Inches per minute	.....	4	.....
Tensile strength (minimum)	164.015–4(h)	P.s.i.	30	20	60
Ultimate elongation (minimum)	164.015–4(h)	Percent	75	75	.....
Water absorption (maximum)	164.015–4(i)	Pounds/feet^2	.06	.06	.06
Flexibility at 0 ±2F 164.015–4(j) No cracking No cracking					
Oil resistance	164.015–4(k)		(1)	(1)	(1)
Odor	164.015–4(l)		(2)	(2)	(2)

[1] No softening or swelling.
[2] Not objectionable.

(b) *Density.* The density of the material shall be determined by dividing the weight of the material by its volume and shall be expressed in pounds per cubic foot. The volume shall be determined by measuring the volume of water displaced by the material or by direct measurement of the specimen using vernier calipers reading to 0.001 inch A sheet specimen 4″×4″×thickness furnished shall be used unless the foam is molded shape, then the largest single piece so molded shall be used.

(c) *Buoyancy in fresh water*—(1) *Specimens.* The buoyancy test shall be made with a sample of the sheet material